MEA Item Statistics Review

Measured Progress
July 2005

Overview of Tasks

- Review items with field test statistics
- Approve or reject items for use in the operational assessment
- Identify rejected items that could be revised

General Item Information

Appears at the top of each page

1011 Maine 04-05 Educational Assessment, ELA – Reading, Grade 8, Seq #26 EQ: N

Asset: Type: Multiple Choice / Key: B / Calculator: N/A

Description: IREF 44571

11:A06: Process of Reading – Identify accurately both the author's purpose and the author's point of view.

Related Cluster Sampling
Right Smart O'Wind Matrix (Field/Pilot)

Item Statistics and Other Information

Appears on the left, below the item

Sample:	Embed	Embed				
Criterion:	TOTAL TEST	AL TEST SCORE				
Difficulty (Mn): 0.7	Discri	mination (r): 0.42				
a: c:	b(01):	b(12):	-			
fit:	b(23):	b(34):				
l(s12):	I(s23):	I(34):	I(34):			
DIF(F-M): NS	DIF(B-W): N	S DIF(H-W):	DIF(H-W):			

Item Statistics

- data provides clues about the item
- the review of data and items is a judgmental process

Item Difficulty (multiple-choice items)

Percent of students with a correct response. Range is from .00 to 1.00

 $\begin{array}{c} 0.00 \\ \text{Difficult} \\ \end{array} \qquad \qquad \text{Easy}$

- MEA needs a range of difficulty, but
 - below .20 may be too difficult
 - above .90 may be too easy

Item Difficulty (constructed-response items)

- Average score on the item.
- Range is from .00 to 4.00

On 4-point items

- below 0.8 may be too difficult
- above 3.6 may be too easy

Item Discrimination

- How well an item separates higher performing students from lower performing students
- Range is from -1.00 to 1.00
- The higher the discrimination the better
- Items with discriminations below .20 may not be effective and should be reviewed

Note: Discrimination is restricted if the item is very easy or very difficult

Other Information: Multiple-Choice

1	Maine 04-05 Educational Assessment 2004-2005, Grade 8, Form 4, Position 26 Session 2B							
	Score	n	% of	% of 4^{th}	% of 3 rd	% of 2 nd	% of 1 st	Mean
	Point		Total	quartile	quartile	quartile	quartile	crit. score
	mc					· · · · · · · · · · · · · · · · · · ·	8	20 10 10 10 10 10 10 10 10 10 10 10 10 10
	BL	50	3	0	1	. 0	11	7.2
	A^{α}	49	3	1	1	3	8	26.7
	B*	1030	70	91	80	72	42	40.0
	C	279	19	8	17	22	29	33.6
	D	54	4	1	1	2	10	25.8
	E E	0	0	02	0	0	20	0.0
	下海T 护护	1462	100	25	25	23	27	37.4

Other Information: Constructed-Response

	Maine 04-05 Educational Assessment 2004-2005, Grade 8, Form 4, Position 27 Session 2B							
- 5	Score	n	% of	% of 4 th	% of 3 rd	D 000000 000000 000000	% of 1st	Mean
	Point		Total	quartile	quartile	quartile	quartile	crit. score
	or							
	BL	59	4	0	1	1	13	9.7
	0	130	9	0	2	6	25	24.6
	1	379	26	4	16	42	41	31.8
	2	580	40	41	59	43	18	38.8
	3	262	18	42	22	7 7	2	43.1
	4	52	4	13	1	1	0	47.5
	·	1462	100	25	25	23	27	37.4

Summary of tasks

Item difficulty

- review items that are very easy or very difficult
 - recommend for use, deletion, or revision

Item discrimination

- review items with poor discriminations
 - recommend for use, deletion, or revision